

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

INTERMOOR, INC.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO. H-05-3401
	§	
DELMAR SYSTEMS, INC.,	§	
	§	
Defendant.	§	

CLAIM CONSTRUCTION MEMORANDUM AND ORDER

Plaintiff InterMoor, Inc. has filed suit against Defendant Delmar Systems, Inc., stemming from a conflict between the parties regarding U.S. Patent Nos. 6,457,908 B1 (filed Nov. 16, 2000) (“the ‘908 Patent”) and 6,685,396 B1 (filed Mar. 28, 2003) (“the ‘396 Patent”). This case is now before the Court for a determination of various disputed terms in the ‘908 and ‘396 Patents.

Based on a review of the parties’ filings, the evidence of record, and the oral arguments presented to the Court, the Court hereby **ADOPTS** the following claim constructions.

I. BACKGROUND

InterMoor and Delmar are competitors in the business of providing mooring systems for large, floating structures typically used in offshore oil drilling and exploration. The ‘908 and ‘396 Patents, both of which are assigned to Delmar, describe a “Method and Apparatus for Suction Anchor and Mooring Deployment and Connection.”¹

¹ The ‘908 and ‘396 patents arose from the same patent application, share the same prosecution history, and are identical except for the claims. The parties agree that each disputed claim term has the same meaning in each claim and each patent in which it appears. (Pl.’s Br. 1 n.1).

One of the key features of the patents is that they contemplate pre-deployment of a mooring anchor; that is, an anchor handling vessel installs the anchor in the sea floor before the “buoyant marine structure” to be moored arrives at the site, allowing for greater flexibility in scheduling. Further, the method described by the patents makes use of a remote operated vehicle (“ROV”) to engage and disengage the lines that connect the installed anchor with the anchor handling vessel or the buoyant marine structure. Because connection occurs by ROV, the anchors may be pre-deployed even in very deep water, where divers cannot be used, and may be installed without a mooring line already attached. Finally, to facilitate engagement and disengagement, the claimed method connects the anchor handling lines and mooring lines to the anchor via a “quick-disconnect connector” that may easily be manipulated by ROV.

In July 2005, InterMoor received a letter from counsel for Delmar, expressing Delmar’s belief that various phases of a mooring operation being handled by InterMoor infringed the ‘908 and ‘396 Patents. After subsequent communications between the parties failed to produce a resolution, InterMoor filed the instant lawsuit. InterMoor seeks declaratory relief stating that it has not infringed the patents, that some or all of the claims of the patents are invalid, and that both patents are unenforceable. Various claim terms are presently in dispute and must be construed, although the parties concur that the primary terms at issue are “quick-disconnect connector” and “buoyant marine structure.”² Each claim is set forth below, with disputed terms highlighted in bold type:

² The Court notes the representations made by counsel during the October 27, 2006 claim construction hearing that both claims 1 and 2 of the ‘908 patent and claim 4 of the ‘396 patent will likely be removed from the litigation.

'908 Patent:

1. A method for deployment of a mooring system having **mooring lines** for a **buoyant marine structure** and for **connecting** the **mooring lines** of the mooring system to the **mooring lines** of the **buoyant marine structure**, comprising:
 - a. providing an **anchor handling vessel** having at least one **mooring anchor** thereon having a **deployment connection** for deployment of said **mooring anchor** and having a **mooring connection** for **connecting** said **mooring anchor** with a **mooring line** of the **buoyant marine structure**, said **anchor handling vessel** having an anchor deployment mechanism incorporating an **anchor handling line** having a **quick-disconnect connector** for accomplishing deployment movement of said **mooring anchor** from said **anchor handling vessel** for **anchor handling line** deployment of said **mooring anchor** to the sea bottom; and
 - b. after deployment of said **mooring anchor**, **disconnecting** said **quick-disconnect connector** of said **anchor handling line** from said **deployment connection** and moving said **anchor handling line** from said **deployment connection** to said **mooring connection**;
 - c. **connecting** said **quick-disconnect connector** of said **anchor handling line** with said **mooring connection**; and
 - d. selectively deploying said **anchor handling line** as a **mooring line** for connection with said **mooring line** of said **buoyant marine structure**.
2. A method for deployment of a mooring system having **mooring lines** for a **buoyant marine structure** having **mooring lines** and for **connecting** the **mooring lines** of the mooring system to the **mooring lines** of the **buoyant marine structure**, comprising:
 - a. providing an **anchor handling vessel** having at least one **mooring anchor** thereon having a **deployment connection** for deployment of said **mooring anchor** and having a **mooring connection** for **connecting** said **mooring anchor** with a **mooring line** of the **buoyant marine structure**, said **anchor handling vessel** having an anchor deployment mechanism incorporating an **anchor handling line** having a **quick-disconnect connector** for accomplishing deployment movement of said **mooring anchor** from said **anchor handling vessel** for **anchor handling line** deployment of said **mooring anchor** to the sea bottom; and
 - b. after deployment of said **mooring anchor**, **disconnecting** said **quick-disconnect connector** of said **anchor handling line** from said **deployment connection**;
 - c. deploying a **mooring line** having a **quick-disconnect connector** for releasable connection with said **mooring anchor**;
 - d. **connecting** said **quick-disconnect connector** of said **mooring line** with said **mooring connection**; and

- e. selectively positioning said **mooring line** for connection with said **mooring line** of said **buoyant marine structure**.

'396 Patent:

1. A method for deployment of a mooring system having one or more **mooring anchors** and **mooring lines** for a **buoyant marine structure**, comprising the steps of:
deploying a **mooring anchor** to a water bottom, said **mooring anchor** having a **mooring connection** for **connecting** said **mooring anchor** with a **mooring line** of a **buoyant marine structure**;
after deployment of said **mooring anchor**, deploying a **mooring line** comprising a **quick-disconnect connector** for releasable connection with said **mooring connection** of said **mooring anchor**; and
performing a subsea connection of said **quick-disconnect connector** of said **mooring line**, with said **mooring connection** of said **mooring anchor**.
2. The method of claim 1, further comprising the step of selectively positioning said **mooring line** for connection with said **buoyant marine structure**.
3. A method for deployment of a mooring system having **mooring anchors** and **mooring lines** for a **buoyant marine structure** and for **connecting** the **mooring lines** of the mooring system to the **mooring anchors** and the **buoyant marine structure**, comprising the steps of:
providing a **vessel** having at least one **mooring anchor** thereon, said **mooring anchor** comprising:
a **deployment connection** for deployment of said **mooring anchor**, and
a **mooring connection** for **connecting** said **mooring anchor** with a **mooring line** of the **buoyant marine structure**,
said **vessel** having an anchor deployment mechanism incorporating an **anchor handling line** for deploying said **mooring anchor** from said **vessel** to a water bottom;
after deployment of said **mooring anchor**, deploying a **mooring line** having a **quick-disconnect connector** for releasable connection with said **mooring connection** of said **mooring anchor**, and **connecting** said **quick-disconnect connector** with said **mooring connection**; and
selectively position said **mooring line** for connection with said **buoyant marine structure**.
4. A method for deployment of a mooring system having **mooring anchors** and **mooring lines** for a **buoyant marine structure**, and for **connecting** the **mooring lines** of the mooring system to the **mooring anchors** and the **buoyant marine structure**, comprising the steps of:
providing a **buoyant marine structure** having at least one **mooring anchor** thereon, said **mooring anchor** comprising:
a **deployment connection** for deployment of said **mooring anchor**, and

mooring connection for **connecting** said **mooring anchor** with a **mooring line** of the **buoyant marine structure**,
said **buoyant marine structure** having an anchor deployment mechanism incorporating an **anchor handling line** for accomplishing deployment movement of said **mooring anchor** from said **buoyant marine structure** to a water bottom;
after deployment of said **mooring anchor**, deploying a **mooring line** having a **quick-disconnect connector** for releasable connection with said **mooring connection** of said **mooring anchor**;
connecting said **quick-disconnect connector** of said **mooring line** with said **mooring connection** of said **mooring anchor**; and
selectively positioning said **mooring line** for connection with said **buoyant marine structure**, and selectively tensioning said **mooring line**.

II. ANALYSIS

A. Legal Standards

Claim construction is a matter of law, and thus the task of determining the proper construction of all disputed claim terms lies with the Court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). The Federal Circuit has opined extensively on the proper approach to claim construction, including in its recent opinion in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

Claim construction centers around “the language of the claims themselves, for it is that language the patentee chose to use to ‘particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention.’” *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (quoting 35 U.S.C. § 112). There is a heavy presumption that claim terms have their ordinary and customary meaning. *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001). The ordinary and customary meaning of a claim term is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1313. However, the claims should not be

examined in isolation; rather, a person of ordinary skill in the art is “deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* at 1313; *see also Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.”) (internal quotation marks omitted).

Therefore, unless the ordinary and customary meaning of a claim term is easily discernible even to a non-expert Court, “the Court starts the decisionmaking process by reviewing the same resources as would [a person in that field of technology], *viz.*, the patent specification and the prosecution history.” *Phillips*, 415 F.3d at 1313. It is not the case that a court must examine the claims, specification and prosecution history (referred to collectively as the “intrinsic evidence”) in a particular order, as has been suggested in certain of the parties’ pleadings in this case. *E.g.*, Def.’s Resp. Ex. 1. Rather, “[t]he sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to those sources in light of the statutes and policies that inform patent law.” *Phillips*, 415 F.3d at 1324 (citing *Vitronics Corp. v. Conceptiontronics, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

The patent claims “must be read in view of the specification, of which they are a part.” *Id.* at 1315 (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978 (Fed. Cir. 1995)). Therefore, the specification deserves great weight during claim construction; “[u]sually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Id.* (quoting *Vitronics*, 90 F.3d at 1582). While the specification may

assist the court in interpreting the disputed claim language, the court must nonetheless take care to avoid reading “limitations appearing in the specification . . . into [the] claims.” *Intervet Am., Inc. v. Kee-Vet Labs., Inc.*, 887 F.2d 1050, 1053 (Fed. Cir. 1989); *see also Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1325 (Fed. Cir. 2003).

A court construing claims should also look to the prosecution history of the patent. *See Phillips*, 415 F.3d at 1317 (“we have held that a court ‘should also consider the patent's prosecution history, if it is in evidence.’” (quoting *Markman*, 52 F.3d at 980)). The prosecution history consists of the record of the proceedings before the U.S. Patent and Trademark Office (“PTO”), including the prior art cited during the examination of the patent. This history demonstrates how the inventor understood the invention, and it can help the court determine “whether the inventor limited the invention in the course of the prosecution, making the claim scope narrower than it would otherwise be.” *Id.* (citing *Vitronics*, 90 F.3d at 1582-83).

The parties disagree in their pleadings about the proper standard that the Court should apply in considering prosecution history evidence. The Court finds that, at the present stage of the litigation, where neither party has invoked the specific doctrine of prosecution history disclaimer, *Phillips* indicates not only the appropriateness but also the importance of considering the history of the patents-in-suit. It is incumbent upon the Court to explore whether the prosecution history may “*inform* the meaning of the claim language,” *id.* (emphasis added), even if the history does not “clearly” or “unmistakably” determine that meaning. The Court does bear in mind, as noted by the Federal Circuit, that “because the prosecution history represents an ongoing negotiation between the PTO

and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.” *Id.*

Finally, the Court may also find it useful to examine “extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.* at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). The use of extrinsic evidence in this case has been an additional source of controversy between the parties. The Court, however, adheres to the principle that because extrinsic evidence “can help educate the court . . . it is permissible for the district court in its sound discretion to admit and use such evidence.” *Id.* at 1319. It is true, of course, that “while extrinsic evidence can shed useful light on the relevant art . . . it is less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Id.* at 1317 (internal quotation marks omitted).

B. Disputed Terms

1. “Quick-disconnect connector”

One of the principal disputes between the parties involves the proper scope of “quick-disconnect connector” (“QDC”) in the context of the patents. InterMoor argues that the QDC claimed by the ‘908 and ‘396 Patents is limited to the device pictured in Figs. 21-25, which illustrate a very particular type of connector comprised of only two elements, a male and a female, with no movable sub-elements.³ Delmar contends that its patents cover any QDC that is a “device for connecting one object to another and having the capability of quick and simple connection or disconnection subsea by ROV,”

³ There was considerable discussion at the October 27, 2006 claim construction hearing about the significance of adding an optional, movable, non-load-bearing latch to the QDC pictured in Figs. 21-25. The issue of the movable latch will be addressed later in the analysis.

including a device that might incorporate movable parts. For the reasons discussed below, the Court adopts a third, intermediate interpretation of QDC: A two-component device for connecting one object to another, not incorporating any internal movable load-bearing sub-components, and having the capability of quick and simple connection or disconnection subsea by ROV.

Beginning with the claims, all six of the '908 and '396 claims refer to or incorporate a QDC, but none of them further describes or defines it. (*E.g.*, “deploying a mooring line comprising a quick-disconnect connector,” “incorporating an anchor handling line having a quick-disconnect connector,” “connecting said quick-disconnect connector of said mooring line with said mooring connection.”) Additionally, both parties have acknowledged that “QDC” has a commonly understood general meaning in the field of oil exploration technology, as referring to a category of connectors that may be readily engaged and disengaged (*e.g.*, Def.’s Br. 22-23; Test. of Pl.’s Expert David Rowan). Therefore, the question is whether the intrinsic evidence indicates a more limited definition of “QDC” in the context of the patents-in-suit.

The specifications yield somewhat mixed evidence regarding the proper scope of the claimed QDC. Only one QDC is illustrated (in Figs. 21-25) and described (*e.g.*, '396 Patent col.12-13), and certain language in the specifications points to the significance of the particular QDC shown in the figures. For example, the specifications explain that “[p]rior to the invention of the subsea connector shown in Figs. 21-25 hereof it was not possible to install an anchor in deeper water without the mooring line being attached to the anchor at the time of deployment.” *E.g.*, '396 Patent col.2 ll.13-14, col.3 ll.46-47.

On the other hand, a few passages in each patent specification suggest that differently configured QDC's may be used in conjunction with the claimed method of mooring. For example, the specifications tell the reader that "the wire socket connector shown in Figs. 21-25 may be of other configuration as desired, it being appropriate only that it have the capability of being quickly assembled and disassembled particularly in a remote environment . . . and perhaps with the use of a ROV or other actuating mechanism . . . for accomplishing quick and simplified connection or disconnection thereof." *E.g.*, '396 Patent col.13 ll.14-23.

In response, InterMoor points to the prosecution history of the two patents, asserting that Delmar was forced to narrow the scope of its QDC in order to overcome claim rejections based on prior art—in effect, that Delmar had to distinguish its QDC from already existing connectors. The Court finds this argument largely persuasive.

The patents-in-suit originated from Patent Application No. 09/715,461 ("the '461 Application"), which was itself a continuation application claiming the benefit of prior U.S. application 09/073,411 ("the '411 Application") (Joint Ex. 29 INT770). During prosecution of the '411 Application, which was eventually abandoned, the examiner twice rejected certain claims as unpatentable over U.S. Patent No. 4,347,012 ("the Glidden Patent"). Like the patents-in-suit, Glidden contemplates the use of a "connector with male and female elements that can be remotely connected and disconnected" in offshore mooring operations (Pl.'s Br. Ex. 11 p.1). Unlike Delmar's QDC, the Glidden connector is tubular and incorporates internal movable sub-elements that maintain the mooring connection and assist in load-bearing (Glidden Patent col.2-4). Finally, under Glidden, disconnection is not accomplished using a ROV, but by manipulating the

mooring line to release axial tension on the connector, causing the male and female elements to disengage (Glidden Patent col.1-2).

In an October 1999 office action, the examiner working on the '411 application stated, in rejecting certain Delmar claims, that it would have been obvious to a person having ordinary skill in the art to add the ROV-operation element to the Glidden connector (Joint Ex. 28 INT4302-03). In response, Delmar submitted an amendment distinguishing its invention from Glidden (Joint Ex. 28 INT4306). As explained in that response, the chief advantage of Delmar's invention over Glidden was that it could be used in deeper waters, since it did not require any surface manipulation of the tension on the mooring line. In order to be able to connect and disconnect a line at a great depth, the Delmar invention incorporated a very simple QDC that could be easily handled by ROV. As the Delmar response notes, "[i]n contrast with the teachings of the Glidden reference, the quick-release connectors of the present invention do not incorporate movable latching components unless a separate latch is provided. Rather, *the present invention provides a two component connector system . . .* A latch, if used, simply prevents a mooring connector or mooring line from becoming inadvertently released from the connector receptacle even under slack line conditions of the mooring string. . . . The fact that the connector mechanism of the present invention can be operated by ROV for both connection and disconnection and is specifically designed to withstand the higher mooring loads in fact make both the connector and the use of it unique to deep water mooring" (Joint Ex. 28 INT4333-35) (emphasis added).

The prosecution history therefore does seem to shed light on what exactly is provided by the patents-in-suit: a QDC of a certain advantageous design. It is true that

the two-component design of the QDC is not the only feature that distinguishes the Delmar and Glidden methods, or even the Delmar and Glidden connectors.⁴ However, recalling Delmar's proposed interpretation of "QDC" and reading it in light of the prosecution history, it is clear that: 1) the prior art already indicated at least one "device for connecting one object to another," and 2) it would have been obvious to a person having ordinary skill in the art to incorporate "quick and simple connection or disconnection subsea by ROV." It was the simplicity of Delmar's *two-component QDC with no internal, movable, load-bearing sub-components* that Delmar emphasized to the examiner, and that design appears to be a key feature of the claimed method.

In the Court's view, the "spirit" of the invention claimed by the Delmar patents requires a certain form of QDC. In light of the patents as a whole and considering the intrinsic evidence, the QDC must not only be amenable to manipulation by ROV subsea, which the '411 examiner found would be obvious, but must also take a simple, two-component form. The Court declines to import any specific configuration into the claims; therefore, the QDC covered by the Delmar patents is not limited to that pictured in Figs. 21-25. However, it appears to the Court that the absence of internal, movable, load-bearing sub-components is crucial in defining the Delmar QDC's innovation above the prior art.⁵ Therefore, the Court interprets "quick-disconnect connector" in the context of the '908 and '396 Patents to refer to a two-component device for connecting one object to another, not incorporating any internal movable load-bearing sub-components,

⁴ For example, in response to the '411 examiner's second rejection of certain claims in view of Glidden, Delmar pointed out that its invention claimed externally extending connection points, rather than the internal receptors described by Glidden (Joint Ex. 28 INT4477-78).

⁵ This interpretation indicates the Court's concurrence with InterMoor that the possibility of adding an optional, non-load-bearing latch to the Delmar QDC does not broaden the basic scope of the term in the context of the '908 and '396 Patents. Furthermore, the Court rejects Delmar's argument, introduced for the first time at the claim construction hearing, that the basic male and female components of the QDC themselves constitute movable sub-components.

and having the capability of quick and simple connection or disconnection subsea by ROV.

2. Remaining connection terms

The parties have submitted conflicting interpretations of the following “connection” terms: “deployment connection,” “mooring connection,” “connecting,” “disconnecting,” and “performing a subsea connection.” The primary disagreement about these terms, however, appears to revolve around whether they must incorporate the specific QDC shown in Figs. 21-25 and described in the patents. Since the dispositive interpretation of “QDC” has been articulated above, and because the parties only cursorily addressed the “connection” terms in their pleadings and arguments, the Court declines to examine these terms further.

3. “Buoyant marine structure”

The second major point of disagreement between the parties involves is the proper interpretation of “buoyant marine structure” in the context of the ‘908 and ‘396 Patents. “Buoyant marine structure” refers to the oil drilling or exploration equipment to be moored to the sea floor. InterMoor asserts that “buoyant marine structure” can include any type of structure designed to float on the surface of the sea, including a platform, any type of buoy, vessel, flare buoy, or any floating device. Delmar would limit the meaning of “buoyant marine structure” to a “vessel” (defined as “a nautical craft designed or utilized for transportation of passengers, cargo or equipment from place to place across navigable waters”) that has certain types of mooring anchors.⁶ Essentially, the parties

⁶ Delmar’s full proposed interpretation for “buoyant marine structure” indicates “a vessel . . . that has Mooring Anchors which are capable of being carried on an Anchor Handling Vessel/Vessel and deployed by an Anchor Handling Line of the ‘anchor deployment mechanism’ of the Anchor Handling Vessel/Vessel upon which said Mooring Anchors are carried.” Mooring anchors (and, more generally, the relationship

disagree over whether the “buoyant marine structure” must be mobile (and therefore likely of a certain size and design, requiring less permanent, less rigid mooring components to attach it to the seabed), or whether it may be a substantially permanent installation, requiring more permanent, rigid mooring components. As explained below, the Court adopts the broader definition of “buoyant marine structure” advanced by InterMoor.

The ‘908 and ‘396 claims do not define “buoyant marine structure,” and the parties concur that it has no ordinary or customary meaning in the field of mooring (*e.g.*, Pl.’s Br. 15, Def.’s Br. 15). In the Court’s view, however, “buoyant marine structure” has a readily apparent, ordinary English meaning: a structure that floats on the sea.⁷ Additionally, the word “vessel” appears throughout the claims in apparent reference to a craft that transports and handles anchors (*e.g.*, ‘396 Patent cl. 3); it seems that Delmar could easily have used the phrase “buoyant marine vessel” rather than “buoyant marine structure” if it had intended to limit the meaning of the term.

The Court also finds support in the intrinsic evidence for a broader interpretation of “buoyant marine structure.” Looking to the specification, the very first sentence of both patents (in the abstract) describes “[a] method and apparatus for deployment of mooring systems for buoyant marine structures *such as* mobile offshore drilling units and for connecting the same to the mooring lines thereof” (emphasis added). Moreover, the “Field of the Invention” section states that “this invention concerns a wire socket

between the interpretation of “buoyant marine structure” and the interpretations of various mooring components) will be addressed later in the analysis.

⁷ The Court disagrees with Delmar’s argument that InterMoor’s proposed interpretation of “buoyant marine structure” would include “anything which floats on the surface of the water, including flotsam, jetsam, debris, seaweed, etc.” (Def.’s Resp. 18). Given the principle of construction that calls for the claims to be read in light of the patent as a whole, it would be apparent to a person having ordinary skill in the art that “buoyant marine structure” refers to equipment and installations used in the field of oil exploration and drilling.

connector mechanism which facilitates subsea connection and reconnection of mooring lines of *semi-submersible drilling rigs, production and drilling platforms and the like* to suction anchor piles and other anchor devices” (e.g., ‘396 Patent col.1 ll.14-18) (emphasis added). In the section entitled “Description of the Prior Art,” the patents observe that “[p]resent procedures for installing subsurface anchors and establishing mooring [sic] the connection between the anchors and a *semisubmersible drilling rig* has required the presence of two service vessels . . .” (e.g., ‘396 Patent col.1 ll.29-33) (emphasis added).⁸ Finally, the prosecution history of the ‘411 Application indicates that in a June 1999 amendment, Delmar substituted “buoyant marine structure” for “marine vessels” in the claims, suggesting that Delmar sought a broader scope for the term (Joint Ex. 28 INT4231-32).

It is true that the specifications occasionally, in referring to the structures to be moored, use the phrases “mobile offshore drilling units” (“MODU’s”) and “other marine vessels,” rather than more open-ended language. E.g., ‘396 Patent col.13 l.3. However, the patents never coherently or formally limit “buoyant marine structures” to MODU’s or other vessels. Rather, the language that *expands* the meaning of “buoyant marine structure,” cited above from the specification and prosecution history, much more clearly conveys an intent to define the term, and to define it broadly.

The Court further finds Delmar’s approach, which essentially defines “buoyant marine structure” by the anchors it uses, to be artificial. *See supra* note 6. Delmar’s interpretation requires a “buoyant marine structure” to have mooring anchors that can be

⁸ As the Court understands the extrinsic evidence with which it has been presented, semi-submersible drilling rigs and production and drilling platforms (to which the patent specifications themselves refer) are not universally mobile, as a “vessel” must be under Delmar’s definition. E.g., Test. of Pl.’s Expert David Rowan.

carried on an anchor handling vessel/vessel, but that limitation can at best be only indirectly inferred from the claims, and seems to invite the tail to wag the dog. The Court also observes that claims 1, 2, and 4 of the '396 patent do not even call for the mooring anchor to be portable by any type of anchor handling or other vessel.

For the above reasons, the Court adopts InterMoor's proposed interpretation of "buoyant marine structure": Any type of structure that is designed to float on the sea, which could include a platform, any type of buoy, a vessel, flare buoy or any floating device. It is not limited to a structure in the nature of a MODU or rig, or to one from which offshore operations are conducted.

Finally, because the Court finds that "buoyant marine structure" should not be interpreted to refer to a vessel, it need not address the meaning of "vessel."

4. Mooring components

Five terms remain in dispute between the parties: "anchor handling vessel," "line," "anchor handling line," "mooring line," and "mooring anchor." Each of these items is a component of the mooring system described by the patents-in-suit. The parties' proposed interpretations are summarized below:

Term in dispute	InterMoor's Proposed Interpretation	Delmar's Proposed Interpretation
anchor handling vessel	A nautical craft that is used to deploy an anchor.	A vessel which is capable of transporting the mooring anchors of a buoyant marine structure and deploying said mooring anchors of said buoyant marine structure by an anchor handling line which is an integral part of the "anchor deployment mechanism" of said (same) anchor handling vessel.
line	The interpretation depends on the context; "line" has one meaning when used in the term "anchor handling line" and another when used as a "mooring line."	A long, thin, flexible tension bearing member used to tie one nautical object to another.

anchor handling line	A line for deploying an anchor from an anchor handling vessel to the seabed.	A line which is part of the “anchor deployment mechanism” of an anchor handling vessel; which is used for deploying a mooring anchor of a buoyant marine structure from said anchor handling vessel to the seabed.
mooring line	Any type of line, including a wire, chain, synthetic rope, tether or tendon, used to connect the buoyant marine structure with the mooring anchor. At least one mooring line is connected to the mooring anchor by a quick-disconnect connector. Mooring lines do not have to be flexible or have a particular tensile strength, nor is it necessary for them to be carried on and deployed from (and can be retrieved to) either an anchor handling vessel, or from a buoyant marine structure, by an anchor handling vessel.	A line used to connect a buoyant marine structure to a mooring anchor engaged with the seabed.
mooring anchor	Any type of device, temporary or permanent, that is placed on or below the seabed (or partly on the seabed and partly below the seabed) and which is used to provide mooring for a buoyant marine structure (defined above). It does not have to be retrievable and may include drilling templates, pilings, structures and the like, which are substantially permanently affixed to the sea-bed.	A device engaged with the seabed for fixing the position of a buoyant marine structure; and, which is capable of being disposed on an anchor handling vessel and deployable to the seabed by an anchor handling line incorporated into “anchor deployment mechanism” of said anchor handling vessel.

The parties have characterized their disagreements as turning largely on the interpretation of “buoyant marine structure”; in fact, each of the mooring component definitions proposed by Delmar incorporates and refers to a “buoyant marine structure.” Because Delmar views “buoyant marine structure” as a “vessel,” meaning that it is mobile and likely of a certain size and design, it seeks similarly to constrain each mooring component. For example, Delmar would limit “mooring anchor” to those anchors that are temporary and portable by conventional tug-style anchor handling vessels (in contrast to a very large, substantially permanent foundation template) (Def.’s

Br. 20-21). Delmar also seeks to exclude any craft that could carry a larger anchoring device, such as a large, heavy-lifting crane vessel, from the definition of “anchor handling vessel” (Def.’s Br. 17-18). Delmar would further limit “mooring line” to relatively thin, flexible members, as opposed to the larger, more rigid tendons or tension legs that are often used to moor substantially permanent offshore installations (Def.’s Br. 19-20).

It appears to the Court that the definition of “buoyant marine structure” is indeed central to determining the proper scope of each of the mooring components. Because the Court has adopted a broad definition of “buoyant marine structure,” it would be virtually nonsensical to narrow the meanings of the mooring components as Delmar proposes. Limiting any of these terms would, essentially, constitute an indirect limitation on “buoyant marine structure.” For example, excluding large foundation templates from the definition of “mooring anchor” would almost certainly constrain the types of “buoyant marine structures” that could be moored using the method claimed in the patents. Therefore, the most coherent course is to adopt InterMoor’s proposed interpretation of each of the mooring component terms.

Construing the mooring component terms in light of “buoyant marine structure” is not merely a convenient exercise in logic. Rather, it accords with the Federal Circuit’s mandate to look at disputed terms in the context of the patent as a whole, and the intrinsic evidence. *See supra* Part II.A (discussing the proper approach to claim construction). The Court acknowledges that there are some indications in the specifications and in the extrinsic evidence that might tend to limit one or more of the mooring component terms.⁹ However, there are no clear, unambiguous definitions of the mooring components set

⁹ This is especially true in the case of “anchor handling vessel.”

forth in the claims, specification, or prosecution history, and there is even some indication in the early history of the '411 Application that Delmar intended to broaden the definition of “mooring line.”¹⁰

It is no surprise that the process of patent prosecution—in which individual claims are repeatedly amended or sometimes simply deleted in response to very specific rejections—might produce a final product that is less internally coherent than intended. The problem is compounded by the fact that the Delmar claims are heavily inter-referential, in that the scope of each claim term seems to depend on the scope of every other claim term. Finally, the Court was also necessarily influenced by the approach of the parties, both of whom underscored the centrality of “buoyant marine structure” to the interpretation of the mooring components. In the end, it appears more sensible (and more in line with the proper method of claim construction) to define the mooring component terms by reference to the larger structure, the “buoyant marine structure,” than the other way around. The Court adopts InterMoor’s proposed interpretation of “anchor handling vessel,” “anchor handling line,” “mooring line,” and “mooring anchor.”¹¹

III. CONCLUSION

The Court hereby adopts the following construction of disputed claim terms:

Term	Construction
quick-disconnect connector	A two-component device for connecting one object to another, not incorporating any internal movable load-bearing sub-components, and having the capability of quick and simple connection or disconnection subsea by ROV.
buoyant marine	Any type of structure that is designed to float on the sea, which could include

¹⁰ In a preliminary amendment from January 1999, Delmar wrote that “the terms mooring line, wire line, anchor handling line, winch wire, mooring line assembly, chain recovery chain, transfer line, interconnected mooring components, mooring string are all intended to include *all of the load transfer devices that are utilized for the purpose of mooring, without regard to the composition thereof*” (Joint Ex. 28 INT4156-57) (emphasis added).

¹¹ Because the Court accepts the proposition that “anchor handling line” and “mooring line” should be defined separately, it does not adopt any interpretation of “line.”

structure	a platform, any type of buoy, a vessel, flare buoy or any floating device. It is not limited to a structure in the nature of a MODU or rig, or to one from which offshore operations are conducted.
anchor handling vessel	A nautical craft that is used to deploy an anchor.
anchor handling line	A line for deploying an anchor from an anchor handling vessel to the seabed.
mooring line	Any type of line, including a wire, chain, synthetic rope, tether or tendon, used to connect the buoyant marine structure with the mooring anchor. At least one mooring line is connected to the mooring anchor by a quick-disconnect connector. Mooring lines do not have to be flexible or have a particular tensile strength, nor is it necessary for them to be carried on and deployed from (and can be retrieved to) either an anchor handling vessel, or from a buoyant marine structure, by an anchor handling vessel.
mooring anchor	Any type of device, temporary or permanent, that is placed on or below the seabed (or partly on the seabed and partly below the seabed) and which is used to provide mooring for a buoyant marine structure (defined above). It does not have to be retrievable and may include drilling templates, pilings, structures and the like, which are substantially permanently affixed to the seabed.

Because they are superfluous in light of the above interpretations, the Court declines to construe “deployment connection,” “mooring connection,” “connecting,” “disconnecting,” “performing a subsea connection,” “vessel,” and “line.”

IT IS SO ORDERED.

SIGNED this 7th day of November, 2006.



KEITH P. ELLISON
UNITED STATES DISTRICT JUDGE

**TO INSURE PROPER NOTICE, EACH PARTY WHO RECEIVES
THIS ORDER SHALL FORWARD A COPY OF IT TO EVERY
OTHER PARTY AND AFFECTED NON-PARTY EVEN THOUGH
THEY MAY HAVE BEEN SENT ONE BY THE COURT.**